1990 MANAGEMENT PLAN SOUTHEAST ALASKA PURSE SEINE FISHERY



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Alaska Department of Fish and Game Commercial Fisheries Division Southeast Region Juneau, Alaska

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INTRODUCTION

This report provides an overview of how the 1990 salmon purse seine fishery will be managed in Southeast Alaska. The expected run size, management issues, and harvest strategy will be discussed. This plan is based on the 1990 pink salmon forecast and historical escapement and catch information. The area management biologists listed at the end of this plan are available to provide further details regarding implementation in their specific areas.

The purse seine fishery normally accounts for 70% to 90% of the Southeast Alaska commercial salmon harvest. Although the other salmon species are important, most sockeye, chum, chinook, and coho salmon catches are taken incidentally in fisheries directed at pink salmon. Thus the purse seine fishery is managed largely on pink salmon run strength. Purse seine fisheries which target other species of salmon or are located in terminal hatchery areas are discussed individually.

Southeast Alaska pink salmon runs are divided geographically into northern and southern stocks. This plan is divided into a southern portion, consisting of Districts 1 through 7, and a northern portion, consisting of Districts 9 through 14.

A total region harvest of approximately 9.1 million pink salmon is anticipated for the 1990 season, the majority of which will be available for harvest by the purse seine fleet. Harvest forecasts are approximately 7.1 million pink salmon for the southern districts and 2.0 million fish for the northern districts. The anticipated uneven distribution of the run, in both the northern and southern areas, necessitates a conservative management approach for areas where weak runs are forecast.

The 1990 seining season is expected to begin Sunday July 1, with openings in both the southern and northern areas.

GENERAL MANAGEMENT GOALS

The primary management goals for the 1990 Southeast Alaska purse seine fishery are as follows:

- 1. Meet overall pink and chum salmon spawning escapement goals with the best possible distribution to all systems.
- 2. Provide for an orderly fishery while harvesting those fish in excess of spawning escapement needs.

- 3. Minimize, to the extent possible, the interceptions of salmon destined for the districts where weak runs are forecast.
- 4. Promote a harvest of good quality fish within the constraints dictated by run size and timing.
- 5. Manage the District 4 purse seine fishery consistent with the provisions of the U.S./Canada Pacific Salmon Treaty.
- 6. Manage the fishery to comply with a chinook salmon catch ceiling of 11,400 non-Alaskan hatchery fish which are larger than 28 inches.
- 7. Manage the seine fishery in the waters of District 12 north of Point Marsden (along the Hawk Inlet shore) during July consistent with the management plan specified by the Alaska Board of Fisheries.

CHINOOK SALMON HARVEST

Alaska Board of Fisheries regulations require the department to manage the purse seine fishery in a manner that assures the landed catch does not exceed 11,400 chinook salmon larger than 28 inches. The Board took this action as part of an overall allocation scheme among commercial users to meet quotas imposed by the U.S./Canada Pacific Salmon Treaty. In addition, the Board adopted size limits and directed the department to manage in a manner that minimizes incidental mortality. Specific provisions for management of the seine fishery are as follows:

- 1. The landed seine catch limit is 11,400 chinook salmon.
- 2. Only chinook salmon 28 inches in length or larger (as measured from tip of snout to tip of tail) will count against the purse seine catch limit.
- 3. Non-retention of 28 inch and larger chinook salmon will be the primary management measure for maintaining the catch limit. Chinook salmon non-retention will be required early in the season when total salmon catch rates are low. This will allow efficient release of chinook salmon and minimize the impact of incidental mortality. Retention of chinook salmon will be permitted as long as possible, during the time period when the catch rates for other species are high. Once the quota is obtained, non-retention regulations will once again be required.
- 4. Purse seine CFEC permit holders may not sell chinook salmon within a size range of greater than 21 inches and less than 28 inches. Purse seine fishermen are encouraged to avoid fishing areas

that contain concentrations of chinook salmon within this size range and to quickly release those which are caught to minimize mortality.

5. Purse seine fishermen may possess and sell chinook salmon that are less than 21 inches (approximately 5 pounds or less), however, they will not count against the catch limit.

Implementation Plan

Purse seine fishermen can anticipate non-retention of chinook salmon (28 inches or larger in length) during seine fishing periods authorized through most of July. Following the early season non-retention period, purse seine fishermen will be allowed to retain chinook salmon, 28 inches or larger, until the catch limit is obtained. This retention period is expected to be of short duration. It is will be announced via a department news release.

During periods of non-retention, purse seine fishermen are encouraged to avoid fishing areas with high concentrations of chinook salmon and to quickly release those caught in a manner so as to minimize mortality.

To ensure that small (less than 21 inch) chinook are not counted against the quota, the department needs the cooperation of the fishing industry. To accomplish this, the department will require that all chinook salmon sold that are 28 inches or larger in length be specified on fish tickets as species 410 which is pre-printed on each ticket. Chinook salmon 21 inches or smaller should be indicated on fish tickets as species 411. This code will need to be filled in on the fish ticket at the time of sale because the code was not pre-printed on the tickets.

SOUTHERN DISTRICTS PURSE SEINE FISHERY

1990 Pink Salmon Forecast

The 1990 pink salmon forecast for wild runs in the southern districts is 13.5 million fish, with a range of 8.5 to 20.1 million fish. The escapement goal for the southern districts is 6.0 million pink salmon, which leaves a potential harvest of 7.1 million fish (range 2.5 to 14.1 million fish). An uneven distribution of the run is expected, therefore, in order to achieve a good distribution of spawning escapement, the total escapement may exceed the goal. This will reduce the harvest level by the same amount. A majority of the run is expected to be produced from pink salmon stocks returning to streams

in Districts 1, 2, and 3, while pink salmon runs in Districts 5 through 8 are not expected to be large enough to allow directed seine fishing.

Management Problems

The anticipated uneven distribution of the run will complicate management of the fishery. The runs in Districts 6 and 7 are exposed to major seine fisheries on mixed stocks of pink salmon in other districts. Thus a conservative management approach will be necessary in the more terminal areas to prevent over fishing of these stocks.

Management Plan

The overall management plan for purse seine fisheries in the southern districts consists of separate segments for District 4, the inside water pink salmon, the McDonald Lake sockeye salmon, the fall chum salmon, and the terminal area hatchery fisheries.

District 4

The District 4 salmon purse seine fishery will be managed according to the provisions of the U.S./Canada Pacific Salmon Treaty. Under the terms of the new annex (approved in May, 1990), the treaty requires the District 4 purse seine fishery to be managed for the next four years (1990-1993) in a manner that will result in a maximum four-year sockeye salmon harvest of 480,000 sockeye salmon prior to statistical week 31. Furthermore, in any year if the annual catch reaches 160,000 sockeye salmon, prior to statistical week 31, no further fishing periods will be allowed until statistical week 31. The Treaty requires that if catches for the years 1990-1993 exceed or fall short of the 480,000 fish quota by 96,000 fish (20%), the overage or underage will be subtracted from or be added to the limit established for the subsequent four-year period.

Due to the alignment of statistical weeks, in 1990, the treaty period extends over four weeks compared to three weeks for the remaining three years of the 1990 to 1993 annex period. This means the allowable catch of sockeye salmon will need to extend over an additional week during 1990. The sockeye salmon treaty limit period will extend into a period of anticipated high pink salmon availability during the week of July 22 through 28. Therefore, fishing time can be expected to generally be limited to one day per week during the first three weeks. This approach will ensure adequate fishing opportunity in late July to harvest pink salmon runs in the district.

The 1990 season opening date for District 4 is Sunday, July 1 (the first Sunday of July). The initial open period will be of 15 hours duration. Additional fishing prior to week 31 will be based on the availability of sockeye salmon, fishing effort, and the need to spread the allowable harvest of 480,000 sockeye salmon over the next four years and maintain the 160,000 annual catch ceiling. The conservation of local Alaskan sockeye salmon stocks will also be considered when establishing fishing time.

Beginning the week of July 29 (week 31), and continuing until the district is closed, purse seine management will be based on the size of pink salmon runs to the inside fishing districts and the need to harvest a portion of these runs in District 4. During this period, purse seine fishing time in District 4 should not be expected to be more than that being allowed in the inside fishing districts. If runs to inside waters develop below what is needed to meet spawning escapement needs, it will be necessary to curtail the District 4 fishery.

Inside Water Pink Salmon Fishery

Aerial surveys of early run pink salmon producing areas, primarily Boca de Quadra, East Behm Canal, Ernest Sound, and their approaches, will begin in late June and early July.

Seining in the inside waters will begin on Sunday, July 1. The period will be limited to 15 hours duration and will be confined to the southeastern portion of Section 1-F. District 2, south of Scott Point, is expected to be open during the second week of the season.

A conservative management approach will be followed in Clarence Strait. Seining will be limited to the southern portion of District 2, until escapements of pink salmon into northern Clarence Strait, Ernest Sound, west Behm Canal, Cholmondeley Sound, and Kasaan Bay are increasing at a rate that would ensure good escapements to those areas. No seining should be expected in middle Clarence Strait, along the Ship Island and Tolstoi Shores, until it appears that pink salmon spawning escapement goals will be obtained in Districts 6 and 7.

Major purse seine fisheries are unlikely for the upper Clarence Strait portions in Districts 6 and 7. Pink salmon runs into these areas will be monitored closely to determine if a targeted fishery can be conducted on these stocks. Seining in these areas will be based on in-season assessments of pink salmon run strength.

Good overall runs of late migrating pink salmon are expected to District 3, however, an uneven run distribution may develop as the parent year (1988) spawning escapement was not evenly distributed throughout the district. Good spawning escapements were obtained in the southern portions of the district, Section 3-A, while poorer escapements were obtained in the northern portions, Sections 3-B and 3-C. If uneven run strength becomes apparent, it will be necessary to reduce fishing in the those areas

of the district. Additionally, it may be necessary to close portions of District 4 to assure good spawning escapements to all portions of District 3. Seining can be expected to commence in Section 3-A during early August.

McDonald Lake Sockeye Salmon Fishery

The department will monitor the sockeye salmon run to McDonald Lake beginning in early July by aerial surveys and/or test fishing. If an identifiable surplus of sockeye salmon becomes apparent, a limited seine fishery will be open during mid-July to early August in the immediate vicinity of Yes Bay. If a fishery is authorized, the opening will be in conjunction with other seine openings in the region and will probably be of short duration to minimize impacts on other stocks.

It is estimated that the total sockeye salmon run to McDonald Lake could be as high as 170,000 fish. The actual availability in the terminal area will depend on the run strength and the interception rates in other fisheries. The harvest rate for McDonald Lake sockeye salmon has been estimated to range from 15.5% to 59.4% of the total runs in recent years. The sockeye salmon spawning escapement goal is approximately 85,000 fish.

Fall Chum Salmon Fisheries

Some watersheds along the east coast of Prince of Wales Island, in District 2, produce late run chum salmon which have traditionally supported fall purse seine fisheries. Although no formal forecasts are available for these runs some expectations can be based on parent year escapements. The parent year fall chum salmon spawning escapements were slightly below average to Disappearance Creek and Lagoon Creek, the primary spawning streams in Cholmondeley Sound. Escapement was average for the Karta River in Kasaan Bay.

Fall chum salmon fishing should not be expected until early to mid-September, and any openings will be based on observed run strength. The management approach will be similar to recent years where initial openings will include the eastern shore of Prince of Wales Island. If surpluses are identified, purse seine fishing will be confined to the more terminal areas of Cholmondeley Sound.

Terminal Hatchery Fisheries

Terminal area seine fisheries can be expected at Nakat Bay and Eastern Passage to harvest fish returning to Southern Southeastern Regional Aquaculture Association (SSRAA) enhancement facilities. Additionally, seining may occur in the Klawock Inlet terminal area to harvest salmon returning to the

state operated Klawock Hatchery. No common property seine fisheries are expected for the Neets Bay or Carroll Inlet terminal areas in 1990.

The fisheries at Eastern Passage and Nakat Inlet will be managed jointly with SSRAA and according to Board of Fisheries management plans. The open areas and tentative open purse seine fishing times are as follows:

1. The waters of Eastern Passage south of 56°24'50" N latitude and west of 132'06'21" W longitude, with all waters of Madan Bay east of a line from the latitude of the channel marker in the narrows to the eastern tip of Channel Island (56°21'48" N latitude, 132'09'24" W longitude) to the navigational light on the northern tip of Channel Island to the southernmost tip of Point Madan (56°22'39" N latitude, 132'09'42" W longitude) are tentatively scheduled to be open from 6:00 a.m. through 6:00 p.m. on the following dates:

Saturday,	June 30
Thursday,	July 5
Tuesday,	July 10
Sunday,	July 15
Friday,	July 20
Wednesday,	July 25
Monday,	July 30
Saturday,	August 4
Thursday,	August 9
Tuesday,	August 14
Sunday,	August 19
Friday,	August 24
Wednesday,	August 29
Monday,	September 3
Saturday,	September 8
Thursday,	September 13
Tuesday,	September 18
Sunday,	September 23
Friday,	September 28
Wednesday,	October 3
Monday,	October 8

The waters of Nakat Inlet between 54°50' N latitude and 54°56' N latitude are tentatively scheduled to be open from 6:00 a.m. to 6:00 p.m. on the following dates:

Sunday,	July 22
Friday,	July 27
Wednesday,	August 1
Monday,	August 6
Saturday,	August 11
Thursday,	August 16
Tuesday,	August 21
Sunday,	August 26
Friday,	August 31
Wednesday,	September 5
Monday,	September 10
Saturday,	September 15
Thursday,	September 20
Tuesday,	September 25
Sunday,	September 30
Friday,	October 5
Wednesday,	October 10

Purse seine fishermen are reminded that the above fishing schedules are tentative and subject to inseason change. Fishermen should check with the department or SSRAA prior fishing in any of the areas to obtain undated fishery information. Fishermen are requested to ensure the fish caught in the terminal fisheries are reported correctly on fish tickets. This will enable the accurate documentation of fish taken from the special areas and allow area specific catch sampling to determine contribution rates based on recovery of coded micro-wire tags.

Runs of approximately 30,000 chum and 60,000 coho salmon to the Klawock Lake hatchery are anticipated. The department will monitor stock strength of these runs and the fishery will be opened if a harvestable surplus is identified. Seiners should not expect the area to be open prior to September.

NORTHERN DISTRICTS PURSE SEINE FISHERY

1990 Forecast

The 1990 pink salmon forecast for the northern districts is 6.8 million fish, with a range from 3.5 to 13.2 million fish. The overall pink salmon spawning escapement goal for the northern districts is 4.8 million fish. This would allow for a harvest of approximately 2.0 million fish at the mid point of the forecasted run. The actual catch will vary depending on the run strength and distribution.

Spawning escapements goals were achieved in Districts 9 and 12 in the parent year (1988) and good runs are expected to these districts. The 1988 spawning escapements were good in Peril Strait in Section 13-C, where fair runs are expected. The 1988 spawning escapements were approximately 50% of the goal level in District 10 and only limited numbers of pink salmon are expected to be available in that District. The overall runs to Districts 11, 14, and 15 are expected to be poor. Poor runs of pink salmon are expected to the Taku River, and no July fishing is expected to occur along the Hawk Inlet shore. The poor 1988 spawning escapements to the outside waters portion of District 13, Sections 13-A and 13-B, are expected to result in poor overall pink salmon runs in 1990.

Management Problems

A major early season management concern will be to prevent excessive interceptions of salmon in the Icy Strait and Chatham Strait mixed stock fishing corridors until run strength can be assessed in terminal areas.

Management Plan

The northern area purse seine fishery management plan consists of separate segments for the outside water areas of Sections 13-A and 13-B, the inside water areas, the Hawk Inlet fishery, the fall chum salmon fishery and the Hidden Falls hatchery terminal fishery.

Outside Water Fishing Areas (Sections 13-A and 13-B)

Management of Sections 13-A and 13-B, along the outer coastal areas of Baranof and Chichagof Islands, is distinct from the management of the northern inside fishing areas. The fish in Sections 13-A and 13-B enter directly from the ocean and do not pass through major inside migration corridors.

Poor overall pink salmon runs are expected to the outer coastal fishing areas and no general seining is expected until run strength can be estimated. Aerial and vessel surveys will begin in early July. Although poor overall runs are expected, a notable exception may be for pink salmon runs to Slocum Arm, where parent year (1988) spawning escapements were good. Limited pink salmon seining could begin as early as the last week of July in Slocum Arm if runs are of sufficient size.

The summer chum salmon runs will be monitored to determine run strength beginning in early July. If harvestable surpluses can be identified, purse seine fishermen can expect portions of Sections 13-A and 13-B to be open for harvesting of summer chum salmon by mid-July. These fisheries will be open early in the runs to allow harvesting when quality is good.

Purse seine fishermen should not expect any directed fisheries to harvest the chum salmon run to the Northern Southeastern Regional Aquaculture Association (NSRAA) enhancement facilities in Sitka Sound. NSRAA anticipates that the entire run will be needed for brood stock and/or cost recovery. Therefore, purse seining in the vicinity of these facilities will most likely be based only on the need to harvest local pink salmon stocks.

Short purse seine openings to harvest sockeye salmon along the outer coast of lower Baranof Island are expected to take place during mid-July to early August. These fisheries target on runs to Necker Bay and Redfish Bay and openings will be based on run strength to these systems. More than one opening may be allowed in Redfish Bay.

Inside Water Fishing Areas

Aerial surveys, to evaluate incoming pink salmon run strength, are expected to begin in late June for the northern inside fishing districts. The 1990 seining season will begin on, Sunday, July 1 with an initial open period of 15 hours duration.

Summer chum salmon will be the target species in the vicinity of Port Frederick (District 14). During the initial open period, the waters of Section 14-B will be open south of the latitude of Crist Point, including major portions of Port Frederick. Additional chum fishing, in Section 14-B, will depend on the observed run strength entering Port Frederick.

Pink salmon directed seining should be expected to be conservative until the run strength to the major areas can be evaluated. However, on the initial open period, July 1, seining will be allowed at the entrance to Tenakee Inlet. Subsequent seining for harvesting early runs will be dependent on observed run strength.

Early run pink salmon seining should not be expected in Chatham Strait unless the early run develops stronger than forecasted. However, portions of Peril Strait, Section 13-C, are expected to be open on July 8 to harvest early run pink salmon destined for Hoonah Sound. Seining in portions of District 10 may be possible on July 8 depending on the run strength.

By late July, middle and late run pink salmon runs should start to enter the inside northern districts. The initial opening of Chatham Strait, south of Point Marsden, can be expected in late July to help assess the strength of the incoming District 12 middle run of pink salmon. Seining is expected to begin in District 9 during late July along the Admiralty Island shore in Section 9-B and in the vicinity of Red Bluff along the Baranof Island shore of Section 9-A. Seining should not be expected until early August in the Kuiu Island fisheries of Section 9-A.

Hawk Inlet Shore Pink Salmon Fishery

Fishing regulations allow seining in the Hawk Inlet shore fishery, (the waters of District 12 north of Point Marsden), to harvest north bound pink salmon during July. A major component of the pink salmon run in this area originates in the Taku River. A sockeye salmon catch quota of 15,000 fish was specified by the Board of Fisheries for this fishery during the month of July.

A poor run of pink salmon is expected to the Taku River, therefore, no seining is expected during July, 1990, along the Hawk Inlet shore. The department plans to monitor the Taku River pink salmon run to evaluate its strength. If a harvestable surplus of pink salmon can be identified, a portion of the Hawk Inlet shore will be open for a short fishing period. The open area and duration of the period will depend on the observed availability of pink and sockeye salmon in the area and the expected fishing effort.

Beginning on August 1, any purse seine fishing along the Hawk Inlet Shore to access pink salmon bound for Stephens Passage and Lynn Canal, will, as in recent years, be in accordance with the corridor area management approach endorsed by the Alaska Board of Fisheries. Under this approach, purse seine fishing is allowed as far north as the latitude of Hanus Reef Light. If it becomes necessary to protect north migrating pink salmon runs the northern line for upper Chatham Strait seining may be moved approximately 2 miles south of Point Marsden.

If the observed pink salmon run strength in streams near Point Howard is sufficient, purse seining can be expected along the Point Howard shoreline, consistent with recent management practices.

Fall Chum Salmon Fisheries

Portions of the northern fishing districts support distinct runs of fall chum salmon which are harvested by purse seine gear. No formal forecasts are available for these fall chum salmon runs. Parent year fall chum salmon escapements were generally good and a good fall fishing season is expected. Areas expected to be open include Port Camden, Security Bay, Chaik Bay, Nakwasina Sound, Katlian Bay and Excursion Inlet. Fall seining will be managed on the basis of visual observations of run strength in the bays beginning in mid-August and continuing through September and October.

As a result of new regulations, seining for fall chum salmon at Excursion Inlet can be allowed in the waters of Section 14-C north of the latitude of the northernmost tip of the Porpoise Islands.

Hidden Falls Terminal Hatchery Fishery

The Hidden Falls Hatchery, located at Kasnyku Bay, is expecting a chum salmon run of approximately 260,000 fish. The preseason expectation is that approximately 40,000 chum salmon will be available for common property harvesting in 1990. The area will be monitored to evaluate the actual run strength and any fishing will be based on this evaluation. The initial open period should not be expected until July 8.

FISHERY CONTACTS

Following are Commercial Fisheries contacts regarding this management plan:

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Area Management Biologist Petersburg, Alaska 99833

(907) 772-3801

Randy Timothy Box 200

Assistant Area Biologist Wrangell, Alaska 99929

(907) 874-3822

Bob DeJong Box 510

Area Management Biologist Sitka, Alaska 99835

(907) 747-6688

The following is a list of telephone numbers that may be called during the purse seine fishing season to obtain recorded announcements concerning areas open to purse seine fishing:

 Ketchikan
 (907) 225-6870

 Petersburg
 (907) 772-3700

 Sitka
 (907) 747-5022

 Juneau
 (907) 586-3505

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